

## Abstract of the Disclosure

An endoscope system is provided with a light guide including a plurality of optical paths, and a low-coherent light source that emits a low-coherent light beams. The low-coherent light source is provided at a proximal end side of the light guide. The light beams emitted by the low-coherent light source are incident on the plurality of optical paths, respectively. The endoscope system is further provided with an interferometer unit. The interferometer unit includes a beam splitting element that splits each of the low-coherent beams emitted from the distal end of the light guide and emits split one of each of the beams to an object, a reference optical system that guides the other split beam of each of the beams, a reflector unit that reflects the beams guided by the reference optical system toward the beam splitting element, and a light detecting device that detects an interfered beam generated by interference, at the beam splitting element, between the beam reflected by the object and the beam reflected by the reflector unit. The endoscope system is further provided with a driving unit that moves the interferometer unit toward/away from the object, and a signal processing system that generates a tomogram based on signals detected by the light detecting device.

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